



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 09/689,139 | 10/12/2000 | John Jianhua Chen | S63.2-9178 | 7998 |
| 490 | 7590 | 02/17/2004 | EXAMINER | |
| VIDAS, ARRETT & STEINKRAUS, P.A. 6109 BLUE CIRCLE DRIVE SUITE 2000 MINNETONKA, MN 55343-9185 | | | NOLAN, SANDRA M | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1772 | |

DATE MAILED: 02/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/689,139

Applicant(s)

CHEN, JOHN JIANHUA

Examiner

Sandra M. Nolan

Art Unit

1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 20-30 is/are allowed.
- 6) ☒ Claim(s) 1-19 and 31-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims

1. Pursuant to entry of the amendment in the amendment dated 25 November 2003 (Paper No. 20031125), claims 1-34 are pending.

Rejections Withdrawn

2. In view of applicant's persuasive arguments on page 8 of the 25 November 2003 response, the 35 USC 102 rejection over Hannam (GB 2115699A) is withdrawn.
3. In view of applicant's persuasive arguments on pages 9 and 10 of the 25 November 2003 response, the 35 USC 103 rejection over Hannam and Nakagawa (US-6,479,584) is withdrawn.

Withdrawal of Allowability

4. The allowability of claims 9-11 is hereby withdrawn in order to apply the new ground of rejection set out below.

Allowable Subject Matter

5. Claims 20-30 are allowed.

The prior art of record fails to teach or suggest the use of the specific steps recited in claims 20-30 to make catheter balloons.

New Rejections

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 1772

7. Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 10 recites the limitation "said free radical initiator" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

8. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

9. Claims 1-9, 11-19 and 31-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakagawa et al (US 6,479,584).

Nakagawa is discussed in section 8 of the 25 August 2003 office action (Paper No. 10/20030825). Note that Nakagawa teaches that its compositions can be used to make medical devices (col. 25, lines 61-62), the use of polymers having ethylene and propylene backbones in its silane-reactive polymers (col. 4, line 35) and at least three of applicant's silanes, as follows:

- γ -glycidoxypentyltriethoxysilane (col. 16, line 62),
- γ -isocyanatopentyltrimethoxysilane (col. 17, line 2), and
- γ -(meth)acryloxypropyltrimethoxysilane (col. 17, line 12).

Nakagawa fails to teach the production of catheter balloons.

In the absence of convincing objective evidence to the contrary, the use of Nakagawa's compositions to make any particular medical device is deemed to be an

Art Unit: 1772

obvious matter of engineering choice, depending upon the properties desired in the device.

Also, in the absence of convincing objective evidence to the contrary, the use of Nakagawa's compositions to make catheter balloons is deemed a matter of intended use and does not serve to distinguish such balloons from any other medical device made using its compositions.

10. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakagawa et al as applied to claims 1-9, 11-19 and 31-34 above, and further in view of Penfold (US 6,048,935).

Nakagawa is discussed above. It fails to teach organic peroxide initiators.

Penfold teaches that silanes containing unsaturation and hydrolysable groups (col. 4, lines 38-57) can be grafted onto ethylene polymers using peroxide initiators (col. 5, lines 1-9). Its compositions cure quickly (abstract).

The references are analogous because they both deal with the reaction of silanes with ethylene polymers.

It would have been obvious to one having ordinary skill in the art at the time that the invention was made to employ the peroxide initiators of Penfold in Nakagawa's compositions in order to shorten their curing times.

The motivation to use Penfold's initiators in Nakagawa's compositions is found in the Penfold abstract, where it teaches that its compositions cure quickly.

It is deemed desirable to make catheter balloons quickly in order to shorten production time and, thereby, increase manufacturing efficiency.

Art Unit: 1772


Response to Arguments

11. Applicant's arguments with respect to claims 1-30 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication should be directed to Sandra M. Nolan, whose telephone number is 571/272-1495. The Examiner can normally be reached on Monday through Thursday, from 6:30 am to 4:00 pm, Eastern Time.

If attempts to reach the Examiner by telephone are unsuccessful, her supervisor, Harold Pyon, can be reached at 571/272-1498. The general fax number for the art unit is 703/872-9306.



S. M. Nolan
Patent Examiner
Technology Center 1700

SMN/smn
09689139(20040209)